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Response dated November 10, 2004

REMARKS/ARGUMENTS

Claims 1-13, 15-26 are pending.

Claim 13 has been amended to include the limitations of former claim 14, and for clarity. Claim 14 has been cancelled. Consequential amendments have been made to claims 15 and 17. It is believed that claims 13 and 16-18 should now overcome the Examiner's rejections under 35 USC § 112 and 35 USC § 103 in view of US Patent No. 5,838,924 to Anderson et al. (hereinafter "Anderson") and US Patent 6,452,906 to Afferton et al. (hereinafter "Afferton").

The Examiner has newly rejected claims 1-10, 13-16 and 18-26 in view of US Patent No. 5,974,045 to Ohkura et al. (hereinafter "Ohkura") and US Patent No. 5,764,651 to Bullock et al. (hereinafter "Bullock" et al.). The Examiner appears to base this rejection on a statement in Ohkura indicating that alarm detection means 2 in an ATM network monitors some particular portion of each SONET frame to detect the physical layer alarm indicated therein. The Examiner further seems to rely on Bullock as evidence that signal degrade may be monitored at the physical layer. The Examiner concludes that it would have been obvious to use the signal degrade indicator of Bullock as the physical layer alarm indicated in Ohkura to arrive at the claimed invention.

A careful review of Ohkura and Bullock reveal that these interpretations applied by the Examiner are simply not accurate, and that a person of ordinary skill simply would not arrive at the claimed invention in view of Ohkura and Bullock. Specifically, Ohkura generally indicates that the alarm detection means 2 (or ALM detector 11) monitors some particular portion of each frame such as the overhead field to detect a physical layer alarm indicated therein. Ohkura, however, is silent as to the type of physical layer alarm indicated therein. Using the Examiner's reasoning, Ohkura would need to be provided with an alarm indicator, indicating signal degrade in order to

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function as suggested. Signal degrade, however, is a condition and not an alarm. Bullock, for example, illustrates that signal degrade at the SONET layer may be detected at the SONET layer using Bit Interleaved Parity (BIP) checks. However, Bullock does not disclose including an alarm indicator reflecting signal degrade in overhead, as monitored by Okhura. Without such an alarm indicator, alarm detection means 2 (or ALM detector 11) of Okhura would have nothing to detect, and would therefore not be able to detect any physical layer alarm. Put another way, neither Okhura nor Bullock suggest monitoring signal degrade detected at the SONET layer at the ATM layer, and reacting thereto.

Further, a careful review of Okhura clearly reveals that Okhura teaches away from the claimed invention. Specifically, columns 12 to 13 of Okhura describe at length the use of PM (Performance Monitoring) cells. As noted in Column 12, line 66 to Column 13, line 4 "PM cells is [sic.] used to convey the number of user data cells transferred between two OAM cells inserted, error detection code, and the like" Thus, it is submitted that Okhura appears to suggest detecting signal degrade in the conventional way - using performance monitoring flows. Any suggestion that a person of ordinary skill would wish to modify Okhura so that signal degrade would be monitored by monitoring means 1/ ALM detector 11, it is submitted is based purely in hindsight.

Finally, the Applicant notes that the Examiner appears to rely heavily on Bullock. Bullock however, deals with bit error rate detection and reaction thereto in a pure SONET network. Bullock is in no way contrary to the applicant's specification. Applicant does not deny that signal degrade for the purposes of SONET protection switching is detected at the SONET layer. Mere detection of signal degrade at the SONET layer or protection switching at the SONET layer however does not disclose or suggest detection of signal degrade at the physical (i.e. SONET) layer and protection switching in response thereto at the ATM layer, as claimed. In fact, conventional protection switching at the two layers is generally independent - as disclosed on page 6 of the present application when SONET is used as a physical layer

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for an ATM network SONET protection switching is typically disabled in or to avoid contention.

In summary, what Bullock and Ohkura fail to disclose is the possibility of detecting signal degrade at the physical layer and reacting to it at the ATM layer. This it is submitted is only suggested by the present applicant. Any suggestion that a combination of Ohkura and Bullock to arrive at the claimed invention would be apparent to a person of ordinary skill it is submitted is made with impermissible hindsight.

As such, withdrawal of the rejection of claims 1-10, 13-16, and 18-26 under 35 USC § 103 in view of Ohkura and Bullock is requested.

Similarly, withdrawal of the rejection to claims 11-12 and 17 under 35 USC § 103 in view of Ohkura, Bullock and ITU-T I.630 is also requested.

In view of the foregoing favorable reconsideration and allowance of the application are earnestly solicited.

Respectfully submitted,

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